### **AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions of claims in the application

1-39 (cancelled)

40. (currently amended) A compound represented by Formula I:

$$\begin{array}{c|c}
0 & N & R^5 \\
\hline
0 & N & N & R^6 \\
R^2 - N & S & N
\end{array}$$

1

or a pharmaceutically acceptable salt thereof, wherein:

R<sup>1</sup> is selected from the group consisting of:

- a) C(O)R<sup>9</sup>, wherein R<sup>9</sup> is selected from substituted or unsubstituted C(1-18) alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl;
- b)  $C(O)-(CH_2)_{\underline{a}n}-(C(O))_p-(OCH_2CH_2)_mOR^{10}$ , wherein  $\underline{a}$   $\underline{n}=0-6$   $\underline{2}$ ,  $\underline{p}=0-1$   $\underline{1}$ ,  $\underline{m}=0-22$   $\underline{0}$ ; and  $R^{10}$  is H, substituted or unsubstituted C(1-6) alkyl, substituted or unsubstituted heteroaryl; and
- e) C(O) (CHR<sup>11</sup>)<sub>n</sub>-NR<sup>12</sup>R<sup>13</sup> wherein n=1-5; and R<sup>11</sup> is selected from the group consisting of: hydrogen, substituted or unsubstituted C(1-8) alkyl, substituted or unsubstituted C(1-8) aralkyl, substituted or unsubstituted C(1-8) aryl, and substituted or unsubstituted C(1-8) heteroaryl; and wherein R<sup>12</sup> and R<sup>13</sup> are individually selected from the group consisting of: hydrogen, substituted or unsubstituted C(1-8) alkyl, substituted or unsubstituted C(1-8) aryl, substituted or unsubstituted C(1-8) aryl, substituted or unsubstituted C(1-8) heteroaryl, substituted or unsubstituted C(1-8) arylcarbonyl, and substituted or unsubstituted C(1-8) heteroarylcarbonyl; or wherein R<sup>12</sup> and R<sup>13</sup> are combined to form a 5 to 7 membered substituted or unsubstituted heterocyclic ring system group;

 $R^2$  is H or C(1-4) alkyl;

R<sup>5</sup> is selected from the group consisting of: H, methyl, and substituted or unsubstituted benzyl;

R<sup>6</sup> is Ph selected from the group consisting of:

(i) fluoro C(1-6)-alkyl, substituted and unsubstituted C(6-16)-aryl, substituted and unsubstituted heteroaryl, substituted and unsubstituted coumarinyl, and adamantyl;

(iii) 
$$R^{23} R^{28} R^{26}$$
ring A ring B

wherein

X is represented by a bond, O or  $S(O)_n$ , wherein n=0, 1, or 2, and is attached to ring A at the 2, 3, or 4 position;

R<sup>23</sup>-on ring A is selected from the group consisting of H, halogen, C(1-8)alkyl, and C(1-8) alkoxy, and represents up to 4 substitutions;

R<sup>24</sup>-through-R<sup>28</sup>-of ring-B is independently selected from the group consisting of: H, halogen, C(1-8) alkyl, C(1-8) fluoroalkyl, and C(1-8) alkoxy,; and

wherein any two adjacent R<sup>24</sup> through R<sup>28</sup> groups may be combined to form a fused aryl, substituted aryl, heteroaryl, or substituted heteroaryl ring system; and

(iv)

$$\begin{cases} \mathbb{R}^{23} & \mathbb{R}^{28} & \mathbb{R}^{27} \\ \mathbb{R}^{26} & \mathbb{R}^{26} \\ \mathbb{R}^{24} & \mathbb{R}^{25} \\ \mathbb{R}^{26} & \mathbb{R}^{26} \\ \mathbb{R}^{26} \\ \mathbb{R}^{26} & \mathbb{R}^{26} \\ \mathbb{R}^{26} & \mathbb{R}^{26} \\ \mathbb{R}^{26} & \mathbb{R}^{26} \\ \mathbb{R}^{26} \\ \mathbb{R}^{26} & \mathbb{R}^{26} \\ \mathbb{R}^{26} \\ \mathbb{R}^{26} & \mathbb{R}^{26} \\ \mathbb{R}^{26} & \mathbb{R}^{26} \\ \mathbb{R}^{26} & \mathbb{R}^{26} \\ \mathbb{R}^{26} \\ \mathbb{R}^{26} & \mathbb{R}^{26} \\ \mathbb{$$

#### wherein

X is represented by a bond, O or S(O)<sub>en</sub>, wherein c n=0, 1, or 2;

R<sup>23</sup>-on-ring-A is selected from the group consisting-of: H, halogen, C(1-8) alkyl, and C(1-8) alkoxy and represents up to 4 substitutions;

R<sup>24</sup> through R<sup>28</sup> of ring B are independently selected from the group consisting of: H, halogen, C(1-8) alkyl, C(1-8) fluoroalkyl, and C(1-8) alkoxy; and wherein any two adjacent R<sup>24</sup> through R<sup>28</sup> groups may be combined to form a fused aryl, substituted aryl, heteroaryl, or substituted heteroaryl ring system; and

wherein the heteroaryl ring systems of ring A and B contain at least one heteroatom and are substituted or unsubstituted.

- 41. (withdrawn) The compound, according to claim 40, in which  $R^1$  is  $C(O)R^9$ , wherein  $R^9$  is selected from substituted or unsubstituted alkyl C(1-18).
- 42. (withdrawn) The compound, according to claim 41, in which  $R^1$  is  $C(O)R^9$ , wherein  $R^9$  is substituted or unsubstituted alkyl C(1-8) alkyl.
- 43. (withdrawn) The compound, according to claim 40, in which  $R^1$  is  $C(O)-(CH_2)_n-(C(O))_p-(OCH_2CH_2)_mOR^{10}$ , wherein n=0-6, p=0-1, m=0-22; and  $R^{10}$  is H, substituted or unsubstituted C(1-6) alkyl.

- 44. (withdrawn) The compound according to claim 43, in which R<sup>10</sup> is H or CH<sub>3</sub>.
- 45. (withdrawn) The compound, according to claim 40, in which R<sup>1</sup> is C(O)-(CHR<sup>11</sup>)<sub>n</sub>-NR<sup>12</sup>R<sup>13</sup> wherein n=1-5; R<sup>11</sup> is selected from the group consisting of: hydrogen, substituted or unsubstituted C(1-8) alkyl, substituted or unsubstituted C(1-8) aralkyl, substituted or unsubstituted C(1-8) aryl, substituted or unsubstituted C(1-8) heteroaryl; and R<sup>12</sup> and R<sup>13</sup> are individually selected from the group consisting of: hydrogen, substituted or unsubstituted C(1-8) alkyl, substituted or unsubstituted C(1- aralkyl, substituted or unsubstituted C(1-8) aryl, substituted or unsubstituted C(1-8) heteroaryl, substituted or unsubstituted C(1-8) alkylcarbonyl, substituted or unsubstituted C(1-8) arylcarbonyl, substituted or unsubstituted C(1-8)heteroarylcarbonyl; or R<sup>12</sup> and R<sup>13</sup> are combined to form a 5 or 6 membered substituted or unsubstituted heterocyclic ring system.
- 46. (withdrawn) The compound, according to 45, in which n=1.
- 47. (withdrawn) The compound, according to claim 45, in which R<sup>11</sup> is selected from hydrogen, substituted or unsubstituted C(1-8) alkyl.
- 48. (withdrawn) The compound, according to claim 45, in which R<sup>12</sup> and R<sup>13</sup> are individually selected from hydrogen and substituted or unsubstituted C(1-8) alkyl.
- 49. (withdrawn) The compound, according to claim 45, in which R<sup>12</sup> and R<sup>13</sup> are combined to form a 5 or 6 membered substituted or unsubstituted heterocyclic ring system.
- 50. (cancelled)
- 51. (withdrawn) The compound, according to claim 40, in which R<sup>2</sup> is H.
- 52. (withdrawn) The compound, according to claim 40, in which R<sup>5</sup> is H.
- 53. (withdrawn) The compound, according to claim 40, in which R<sup>6</sup> is selected from the group consisting of:
- (i) fluoro C(1-6)-alkyl, substituted and unsubstituted C(6-16)-aryl, substituted and unsubstituted heteroaryl, substituted and unsubstituted coumarinyl, and adamantyl;

(iii)

## wherein

X is represented by a bond, O or  $S(O)_{\underline{c}n}$ , wherein  $\underline{c}$  n=0, 1, or 2, and is attached to ring A at the 2, 3, or 4 position;

 $R^{23}$  on ring A is selected from the group consisting of H, halogen, C(1-8)alkyl, and C(1-8) alkoxy and represents up to 4 substitutions;

R<sup>24</sup> through R<sup>28</sup> of ring B is independently selected from the group consisting of: H, halogen, C(1-8) alkyl, C(1-8) fluoroalkyl, and C(1-8) alkoxy<del>, ;</del> and

wherein any two adjacent R<sup>24</sup> through R<sup>28</sup> groups may be combined to form a fused aryl, substituted aryl, heteroaryl, or substituted heteroaryl group ring system.

- 54. (withdrawn) The compound, according to claim 51, in which R<sup>6</sup> is selected from the group consisting of:
- (i) substituted and unsubstituted C(6-16)-aryl, substituted and unsubstituted heteroaryl;

(iii)

### wherein

X is represented by a bond, O, and is attached to ring A at the 2, 3, or 4 position;

R<sup>23</sup> on ring A is hydrogen; and

 $R^{24}$  through  $R^{28}$  of ring B is independently selected from the group consisting of: H, halogen, C(1-8) alkyl, C(1-8) fluoroalkyl and C(1-8) alkoxy.

# 55. (cancelled)

56. (withdrawn) The compound, according to claim 40, in which the substituents are selected from the group consisting of:

- 1) H, halogen, nitro, cyano, C(1-8) alkyl, C(1-8) fluoroalkyl, aralkyl, aryl, heteroaryl, C(1-8) alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, azide, B(OH)<sub>2</sub>, and adamantyl;
- 2) XR<sup>19</sup> wherein X=O or S and R<sup>19</sup> is C(1-8) alkyl, hydroxyl, C(1-4) alkoxy, fluoroalkyl, aryl, heteroaryl, lower alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, lower alkylaminocarbonyl, and arylaminocarbonyl; and
- 3) NR<sup>14</sup>R<sup>15</sup> wherein R<sup>14</sup> and R<sup>15</sup> are each independently C(1-8) alkyl, or wherein R<sup>14</sup> and R<sup>15</sup> are joined to form an alkyl or heteroalkyl ring system,

wherein the C(1-8) alkyl, C(1-8) fluoroalkyl, aralkyl, aryl, heteroaryl, C(1-8) alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, and C(1-4) alkoxy may be further substituted by the substituents from 1), 2), and 3) above.

57. (withdrawn) A compound, according to claim 40, selected from the group consisting of:

| Co | mpound | R <sup>1</sup>        | R<br>2 | R <sup>5</sup> | R <sup>6</sup> |   |
|----|--------|-----------------------|--------|----------------|----------------|---|
|    | 15     | CH <sub>3</sub> C(O)- | Н      | Н              | Ph             | ; |

| Compound | $\mathbf{R}^{1}$                                       | R | R <sup>5</sup> | $\mathbf{R}^6$ |
|----------|--|---|----------------|----------------|
| 16       | CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> C(O)-  | Н | Н              | Ph             |
| 17       | tert-BuOC(O)-  | Н | Н              | Ph             |
| 18       | Boc(H)NCH <sub>2</sub> C(O)-                           | Н | Н              | Ph             |
| 19       | TFA. H <sub>2</sub> NCH <sub>2</sub> C(O)-             | Н | Н              | Ph             |
| 20       | Ac(H)NCH <sub>2</sub> C(O)-                            | Н | Н              | Ph             |
| 21       | N O o  | Н | Н              | Ph             |
| 22       | HO <sub>2</sub> CCH <sub>2</sub> CH <sub>2</sub> C(O)- | Н | Н              | Ph             |
| 23       | S NH   | Н | Н              | Ph             |
| 24       | S<br>TFA H <sub>2</sub> N                              | Н | Н              | Ph             |
| 25       | XO N N   | Н | Н              | Ph             |
| 26       | TFA HN   | Н | Н              | Ph             |
| 27       | (CH <sub>3</sub> ) <sub>2</sub> NCH <sub>2</sub> C(O)- | Н | Н              | 4'-F-Ph        |
| 28       | CH₃C(O)-   | Н | Н              | diox-Ph        |
| 29       | CH <sub>3</sub> OCH <sub>2</sub> C(O)-                 | Н | Н              | diox-Ph        |
| 30       | CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> C(O)-  | Н | Н              | diox-Ph        |
| 31       | CH <sub>3</sub> C(O)-                                  | Н | Н              | 4-morph-Ph     |
| 32       | CH <sub>3</sub> OCH <sub>2</sub> C(O)-                 | Н | Н              | 4-morph-Ph     |
| 33       | CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> C(O)-  | Н | Н              | 4-morph-Ph     |
| 34       | CH <sub>3</sub> C(O)-                                  | Н | Н              | 3'-MeO-biPh    |
| 35       | CH <sub>3</sub> OCH <sub>2</sub> C(O)-                 | Н | Н              | 3'-MeO-biPh    |

| Compound | $\mathbb{R}^1$  | R | R <sup>5</sup> | $\mathbb{R}^6$           |   |
|----------|---|---|----------------|--------------------------|---|
| 36       | CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> C(O)- | Н | Н              | 3'-MeO-biPh              | ;                                       |
| 37       | CH₃C(O)-  | Н | Н              | 3'-CF <sub>3</sub> -biPh | ;                                       |
| 38       | CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> C(O)- | Н | Н              | 3'-CF <sub>3</sub> -biPh | ;                                       |
| 39       | CH <sub>3</sub> OCH <sub>2</sub> C(O)-                | Н | Н              | 3'-CF <sub>3</sub> -biPh | ;                                       |
| 40       | CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> C(O)- | Н | Н              | 3'-CF <sub>3</sub> -biPh | ;                                       |
| 41       | 0   | Н | Н              | 3'-CF <sub>3</sub> -biPh | ;                                       |
| 42       | 000000000000000000000000000000000000000               | Н | Н              | 3'-CF <sub>3</sub> -biPh | ;                                       |
| 43       | tert-BuOC(O)-   | Н | Н              | 3'-CF <sub>3</sub> -biPh | ;                                       |
| 44       | CH <sub>3</sub> C(O)-                                 | Н | Н              | 4-(4-Cl-PhO)Ph           | <b> </b> ;                              |
| 45       | CH₃OCH₂C(O)-  | Н | Н              | 4-(4-Cl-PhO)Ph           | <b>]</b> ;                              |
| 46       | CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> C(O)- | Н | Н              | 4-(4-CI-PhO)Ph           | ;                                       |
| 47       | ٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠               | Н | Н              | 4-(4-Cl-PhO)Ph           | ,                                       |
| 48       | PhCH <sub>2</sub> OC(O)-                              | Н | Н              | 4-(4-CI-PhO)Ph           | ;                                       |
| 49       | O NH  | Н | Н              | 4-(4-Cl-PhO)Ph           | • |
| 50       | O H   | Н | Н              | 4-(4-Cl-PhO)Ph           | ; and                                   |
| 51       | NH<br>NH<br>NH<br>NH<br>NH<br>NH<br>NH                | Н | Н              | 4-(4-C1-PhO)Ph           | •                                       |

- 58. (cancelled)
- 59. (previously presented) The compound, according to claim 40, is a salt encapsulated in an encapsulating agent.
- 60. (previously presented) The compound according to claim 59, wherein the encapsulating agent is a cyclodextran.
- 61. (previously presented) The compound according to claims 59, wherein the encapsulating agent is hydroxypropylcyclodextran (HPCD).
- 62. (previously presented) The compound, according to claim 59, in which the salt is selected from the group consisting of: a sodium salt, an ethanolamine salt, a dimethylaminoethanol salt, and a 4-aminopyridine salt.
- 63. (previously presented) The compound according to claim 62, in which the salt is a sodium salt.
- 64. (previously presented) The compound, according to claim 40, is a prodrug.
- 65. (cancelled)
- 66. (previously presented) A pharmaceutical composition comprising a compound, according to claim 40, together with a carrier.
- 67. (withdrawn) A method of preventing or treating peripheral neuropathy in a subject, the method comprising administering to the subject in need thereof an effective amount of the compound, according to claim 40.
- 68. (withdrawn) The method, according to claim 67, in which the peripheral neuropathy is induced by a toxic agent.
- 69. (withdrawn) The method, according to claim 68, in which the toxic agent is a neurotoxic agent or a chemotherapeutic agent.
- 70. (withdrawn) The method, according to claim 69, in which the chemotherapeutic agent is dideoxyinosine, deoxy cytizine, D4T, cisplatin, etoposide, vincristine, epothilone or its derivatives, Taxol<sup>TM</sup>/Taxotere<sup>TM</sup> or derivatives thereof.
- 71. (withdrawn) The method, according to claim 69, in which the neurotoxic agent is vincristine, vinblastine, cisplatin,  $Taxol^{TM}$ , D4T or other antivirals, dideoxy

compounds, alcohol, metals, industrial toxins, overdoses of vitamins A, D or B6, penicillin or chloramphenicol.

- 72. (withdrawn) A method of treating a neurodegenerative disease in a subject, the method comprising administering the subject in need thereof an effective amount of the composition, according to claim 66.
- 73. (withdrawn) The method, according to claim 72, in which the neurodegenerative disease is Alzheimer's disease, Parkinson's disease, ALS, Huntington's disease, muscular dystrophy, diabetes, HIV, an ischemic insult, retinal ganglion loss following acute ocular stroke or glaucoma, a neurodegenerative condition resulting from a viral infection, and a neuropathy resulting from the use of chemotherapeutic agents used in the treatment of HIV and cancer.
- 74. (withdrawn) The method, according to claim 72, in which the neurodegenerative disease is a degenerative disease of the eye.
- 75. (withdrawn) A method of treating a neurodegenerative disease in a subject, the method comprising co-administering to the subject in need thereof the composition, according to claim 66, with COX-2 inhibitors, NSAIDS, acetylcholinesterase inhibitors, L-dopa, ACE inhibitors or insulin.
- 76. (withdrawn) A method of inducing axonal growth and/or repair in a subject, the method comprising administering the subject in need thereof an effective amount of the composition according to claim 66.
- 77. (withdrawn) A method of inducing axonal growth and/or repair in a subject, the method comprising administering to the subject in need thereof the composition, according to claim 66.

## 78. (cancelled)

- 79. (withdrawn) A method of treating a proliferative disease in a subject, the method comprising administering to the subject in need thereof an effective amount of the composition, according to claim 66.
- 80. (withdrawn) The method, according to claim 79, in which the proliferative condition is cancer.

- 81. (withdrawn) The method, according to claim 80, in which the cancer is selected from the group consisting of prostate, colon, neuroblastoma, medulloblastoma, and breast cancer.
- 82. (withdrawn) A method of treating a proliferative disease in a subject, the method comprising co-administering to the subject in need thereof the composition, according to claim 66, with a chemotherapeutic.
- 83. (withdrawn) The method, according to claim 82, in which the chemotherapeutic is Taxol, cisplatin or vinca alkaloids.
- 84. (withdrawn) A process for producing a compound of Formula 1, according to claim 40, the process comprising:

coupling the sulfonamide:

and either R<sup>9</sup>COCl or (R<sup>9</sup>CO)₂O in a

solvent and a base so as to produce the following:

wherein R<sup>2</sup>, R<sup>5</sup>, R<sup>6</sup>, and R<sup>9</sup> are as defined herein.

85. (withdrawn) A process for producing a compound of Formula I, according to claim 40, the process comprising:

coupling the sulfonamide:

<sub>2</sub>N— R<sup>2</sup> and either R<sup>9</sup>COCI or

(R<sup>9</sup>CO)<sub>2</sub>O in a solvent and a base so as to produce the following:

$$\mathbb{R}^9 \xrightarrow{0} \mathbb{R}^2 \mathbb{R}^5$$

wherein  $R^2$ ,  $R^5$ ,  $R^6$ , and  $R^9$  are as defined herein.